pelled with considerable force through the narrow tube of the

papilla.

It is not improbable that this fish is viviparous, and, consequently, that copulation is necessary for the fecundation of the ova. Both our specimens appear to have been obtained at a season remote from that of propagation, as the testes, as well as the ovaries (which are contained in thick membranaceous sacs), were remarkably small in proportion to the large size of the fishes.

XLV.—Diagnoses of new Species of Mollusca and Echinodermata from the Island of Rodriguez. By Edgar A. Smith, F.Z.S.

The following species form part of the collections made at the island of Rodriguez by Messrs. George Gulliver and H. H. Slater, the naturalists sent by the Royal Society with the British expedition for observing the Transit of Venus. Only those species are here mentioned which are apparently undescribed, as it is purposed to publish elsewhere complete accounts of all the specimens obtained at the island.

## Rhizochilus (Coralliophila) squamosissimus, sp. n.

Testa ovato-fusiformis, aliquanto umbilicata, alba; spira elevata, turrita; anfractus 7 convexi, costis spiralibus inæqualibus pulcherrime squamatis, irregulariter alternatim majoribus cincti, et plicis longitudinalibus obliquis clathrati; anfr. ultimus costis spiralibus circiter 26 ornatus, ventricosus, inferne angustatus; apertura ovato-pyriformis, alba, longitudinis totius  $\frac{3}{5}$  vix æquans; labrum margine crenulato; columella alba, callo lævi induta; canalis angustus, obliquus, leviter recurvus.

Long. 31 mill., diam. 16; apertura long. 19, diam. 9.

(Coll. by Slater.)

The spiral ribs are most beautifully scaled, the imbrications being very close together; the longitudinal plications are rather oblique and gradually further apart as the labrum is approached.

#### Melania rodericensis, sp. n.

Testa subulata, pallide olivacea, strigis longitudinalibus purpurcofuscis irregulariter picta, et circa basim anfr. ultimi fascia lata coloris saturatioris cincta, frequenter corio limoso rubro induta; anfractus 11, convexiusculi, sutura leviter obliqua discreti, liris transversis tenuibus plicisque longitudinalibus supra liras paululum granosis ornati; apertura ovata, superne acuminata; columella arcuata, alba.

Long. 16 mill., diam. 5; apertura long. 5, diam. 2½.

Var. major long. 23 mill., diam. 7.

(Coll. by Gulliver.)

This species has a close resemblance to certain varieties of *M. fasciolata* of Oliver, which inhabit Egypt.

# Vaginula rodericensis, sp. n.

Corpus elongatum, utrinque rotundatum, postice leviter angustatum et acuminatum, supernerotundatum, lateraliter carinatum; pallium supra et infra minutissime granulatum, testaceum, irregulariter confertim nigro tessellatum vel punctatum, infra paulo pallidius, marginibus lateralibus haud nigro-punctatis; pes angustus latitudinis corporis \( \frac{1}{4} \) adæquans, testaceus, usque ad extremitatem corporis fere productus; tentacula oculifera nigrescentia; caput tentaculaque buccalia flavo-testacea; orificium femineum paulo pone medium corporis situm.

Long. 30 mill., diam. 10. (specim. in alcohol. serv.).

(Coll. by Gulliver.)

The mantle is rather broader at the anterior extremity than posteriorly, where it is more acutely rounded.

## Diplodonta lateralis, sp. n.

Testa alba, transverse globoso-ovata, antice angustata, postice latissime rotundata, valde inæquilateralis; margo dorsalis utrinque paululum declivis et rectiusculus; valvæ tenuiter concentrice striatæ, hic illic fortius; umbones haud prominentes, conspicue excentrici; impressio muscularis antica elongata angustiuscula, postica aliquanto latior.

Long. 18 mill., latit.  $20\frac{1}{2}$ , crass. 11.

(Coll. by Slater.)

D. coreensis of Adams and Reeve approaches the present species somewhat in form; but the umbones are not so lateral and the anterior end is broader. Within the valves, parallel with the pallial impression on the side towards the umbones, there is a second impression, which is punctured with small pits; but probably this is only an individual peculiarity.

### Avicula fusco-purpurea, sp. n.

Testa inæquivalvis, perobliqua, postice peroblique alata, striis concentricis confertis regulariter sculpta; color externus fusco-purpureus, antice interdum pallescens; rostrum valvæ dextræ mediocriter breve, paululum declive, confertim rugose lamellosum, valvæ sinistræ angustum, magnum; cauda inconspicua; ala per-

obliqua, imo recurva, in margine postico valde sinuata; margo valvarum cardinalis rectus; margarita pulcherrime iridescens, a limbo fusco-purpureo, antice pallidiore, posticeque latissimo cincta.

Long. max. 55 mill., diam. 35.

(Coll. by Slater.)

## Comatula indica, sp. n.

Rays thirty; disk small, convex, subpentagonal; dorsal cirri—?, probably about forty-five; radialia two, the axillary radiale without a syzygium; between this and the next bifurcation are two joints; and after two more segments the two innermost arms bifurcate; none of the brachial axillary joints has a syzygium; every third segment above all the axillaries with a syzygium; and on the arms beyond these the syzygia are at very unequal distances, the first one being separated by as many as twenty joints, but generally by about fourteen; then nearer the extremity of the arms they are rather more proximate, there being from six to ten intermediate joints. The second pinnulæ very long, and composed of much-elongated joints. Colour pale purplish brown, with the sutures of the arm-joints blackish brown. Length of rays about 6 inches (153 mill.); diameter of disk 6 mill.

(Coll. by Mr. H. H. Slater.)

The disk is covered with deep little pits, about forty-five in number, which have been the sockets of the dorsal rays. The second pinnulæ, which are conspicuously long (about 17 mill.), are situated on the first and second joints, above these, which always have a syzygium—or, in other words, on the fourth and fifth segments, above the axillaries.

## XLVI.—Description of a new Species of Talitrus from Rodriguez. By Edward J. Miers, F.L.S.

## Talitrus Gulliveri, sp. n.

Slender, smooth, with the buccal organs considerably projecting, as in *T. locusta*. Superior antennæ scarcely as long as the cephalon, and about reaching to the extremity of the second joint of the inferior antennæ, with seven joints exposed; the basal very short, the two next longer, subequal, together about as long as the four terminal joints, of which three are equal and the last minute. Inferior antennæ slender, not as long as the pereion, with the basal joint of the peduncle very short, the second joint more than half the length of the